

Amendment to the Claims:

1. (Currently amended) A method of curing concrete ~~[[utilizing]]~~ comprising the steps of:
providing at least one electrically conductive circuit within uncured concrete; and
[[by]] energizing the circuit with electrical power, thereby [[to]] resistively heating the circuit
during at least a portion of the time of concrete curing.
2. (Currently amended) The method of claim 1, wherein the resistive heating step
includes heating the concrete ~~[[concrete is heated by the circuit]]~~ during at least a portion of the
time of concrete curing.
3. (Canceled)
4. (Currently amended) The method of claim ~~[[3]]~~ 2, wherein the concrete is heated to a
first temperature and then the electrical power controllably modified prior to completion of
the curing and wherein the amount of electrical power is modified to achieve an intended rate
of compressive strength gain of the concrete during cure.
5. (Currently amended) The method of claim 1 wherein the circuit comprises of heating
elements positioned in the uncured concrete such that, after curing, the heating elements
structurally reinforces the concrete ~~[[is comprised of non-metallic electrically conductive~~
~~material.]]~~
- 6-24 (Canceled)

25. (Currently amended) A method of curing concrete comprising the steps of:
- a) placing at least one electrically conductive circuit within a concrete form;
 - b) adding uncured concrete into the form;
 - c) connecting the circuit to an electrical power source to resistively heat the circuit;[[,]]
and
 - d) using the resistive heat to raise the temperature of the uncured concrete.

26-28 (Canceled)

29. (Currently amended) The method of claim 25, wherein the concrete contains heat responsive additives such that the resistive heating step includes activating the additives to cause [[to activate]] a hydration reaction by means of an interlaminar heating.

30. (Currently amended) [[A]] The method of claim 25, further comprising the step of controllably initiating the cure of concrete by placing [[placement of]] additives in [[to]] the uncured concrete and at least one resistively heatable electric circuit that is capable of furnishing sufficient heat activation energy for curing.

31-37 (Canceled)

38. (Currently amended) A concrete object or structure comprising:
a concrete body formed by a cured concrete mixture;
[[a]] at least one electrically conductive circuit supported within the concrete body; and
[[b]] means to connect the circuit to an external electrical power source.
39. (Canceled)
40. (Currently amended) The concrete object or structure of claim [[39]] 38, further comprising rebar elements positioned within the concrete body wherein the circuit is attached to the rebar.
41. (Currently amended) The concrete object or structure of claim 40, wherein the attached circuit is electrically isolated from the rebar.
42. (Currently amended) The concrete object or structure of claim 38, wherein the circuit is wound around the rebar.
43. (Currently amended) The concrete object or structure of claim 38, wherein the electrically conductive circuit is tensioned prior to [[the]] placement [[of]] within the uncured concrete.
44. (Canceled)
45. (Canceled)
46. (Currently amended) [[A]] The concrete object or structure of claim 38, wherein the [[containing at least one]] electrically conductive circuit is comprised of braided carbon fibers.
47. (Currently amended) The concrete object or structure of claim 46, wherein the braided carbon fibers are oriented at varying angles.
48. (Currently amended) The concrete object or structure of claim 46, wherein the circuit comprises multiple layered braided carbon fibers.

49-54 (Canceled)

55. (Currently amended) [[A]] The concrete object or structure of claim 38, wherein the
[[containing an electrical]] circuit is comprised of carbon fibers that are mechanically wound.

56. (Currently amended) [[A]] The concrete object or structure of claim 38, wherein the
[[containing an]] electrical circuit comprises[[ing]] consolidated bundles of carbon having a first
end and a second end attached to at least one buss bar.

57. (Currently amended) The concrete object or structure of claim 56, wherein the [[The]]
buss bar [[of claim 56]] is [[the]] an electric contact point through which the electric power is
driven to generate resistive heat sufficient to activate a hydration reaction within concrete.

58. (Currently amended) [[A concrete structure containing an electrical circuit comprised
of]] The concrete object or structure of claim 38, wherein the electrical circuit includes
carbon fibers selected from the group of carbon fibers consisting of:

carbon fibers mechanically consolidated by weaving;[[.]]
carbon fibers mechanically consolidated by stitch bonding;
carbon fibers mechanically consolidated by knitting; and
carbon fibers mechanically consolidated by braiding.

59-67 (Canceled)

68. (New) The concrete object or structure of claim 38, wherein the circuit is comprised of
non-metallic electrically conductive material.

69. (New) The concrete object or structure of claim 38, wherein the electrically conductive
circuit is formed of carbon fibers.

70. (New) The concrete object or structure of claim 69, wherein the circuit contains
thermally responsive filaments commingled with carbon fibers.

71. (New) The concrete object or structure of claim 69, wherein the carbon fiber is coated with a non electrically conductive coating material.

72. (New) The concrete object or structure of claim 71, wherein the coating material is a polymer.

73. (New) The concrete object or structure of claim 71, wherein the coating material is a textile.